GENERAL ATOMICS

May 2, 1997
ENV - 2730

VIA CERTIFIED MAIL
Yosh Tokiwa
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
M/C CMD-4-2
San Francisco, CA 94115

SUBJECT: Notification For A General Atomics Polychlorinated Biphenyl (PCB) Treatability Study

REF:

Company:	General Atomics
Site Location:	3550 General Atomics court, San Diego, CA 92121-1194
Mailing Address:	P.O. Box 85608 , San Diego, CA 92186
EPA ID Number:	CAD 067 638 957

Dear Mr. Tokiwa:

This letter is to request U.S. Environmental Protection Agency (EPA) approval for General Atomics (GA) to perform a treatability study, as allowed under Title 40 Code of Federal Regulations Sections 760 and 761 (40 CFR 760 & 761). Namely, GA Treatability Study 003 will demonstrate that Super Critical Water Oxidation (SCWO) will meet or exceed levels of performance equivalent to 40 CFR 761.70. GA will comply with all conditions specified in the above sections, including the requirements for storage, treatment, and disposal.

The experimental process, i.e., the Supercritical Water Oxidation (SCWO) Experiment, destroys organic materials, using an oxidant in water at temperatures and pressures above the critical point of water, i.e., 374°C and 218 atm. The dense single-phase aqueous reaction medium enhances mixing and contacting of reactive species and enables mineralization of wastes and in-situ scrubbing of acid gases and particulates, obviating the need for a pollution abatement system. SCWO will process the treatability study sample into carbon dioxide, water, common salts, and metal oxides which will be sampled and analyzed before appropriate disposition.

GA will process municipal sewage sludge containing less that 5,000 parts per million (ppm) of PCBs (below the level established for extremely hazardous waste in California) for the purpose of research and development (R&D). The total quantity of the treatability study sample will be less than 500 pounds. GA will properly dispose of the treatability study sample and/or its residues after the treatability study is completed 1) by efficient destruction by the SCWO process, 2) as hazardous waste, and/or 3) as return samples to the Customer.

The experiment and any testing will be closely monitored and documented. All water used in the experiment will be contained. Prior to discharge as effluent, all water used in the experiment will be analyzed to verify that it is below GA's permitted levels for industrial discharges. In addition, GA certifies that the activities conducted under this treatability study will not serve as a mechanism to commercially treat or dispose of PCB waste.

Enclosed for your information is a brief description of GA's SCWO technology. We trust that the information provided herein is sufficient for your consideration of our request and GA looks forward to an early favorable response.

If you have any questions about this request, please contact Paul Englert at (619) 455-2466 or my office at (619) 455-2823. 2822 Fax

Very truly yours,

Keith E. Asmussen

Keith E. Asmussen, Director
Licensing, Safety and Nuclear Compliance

Enclosure: General Atomics' "Supercritical Water Oxidation: Safe Destruction of Toxic and Hazardous Wastes"

KEA:pfe PE050297.KEA